

**Amendments to the Claims:**

1. **(Currently amended)** A hermetic compressor comprising a housing which contains oil and houses a compression mechanism for compressing a refrigerant gas,

the compression mechanism comprising:

    a crankshaft disposed in a vertical direction and having a main shaft and an eccentric shaft;

    a block forming a cylinder having a cylinder axis;

    a piston arranged to reciprocate in the cylinder in a direction of the cylinder axis, the piston having an outer circumferential surface and a top surface;

    a piston pin disposed in the piston such that a center axis of the piston pin is parallel to the eccentric shaft;

    a connecting rod for connecting the eccentric shaft to the piston pin; and

    an oil supplying structure for supplying the oil to an outer circumferential surface of the piston;

    wherein the piston has an at least one under cut formed in the outer circumferential surface outside a sliding surface thereof existing in a parallel direction and a perpendicular direction of the piston pin, as viewed in an axial direction of the piston; and

wherein a pair of first lines are defined at the outer circumferential surface of the piston so as to be parallel to the piston axis and so as to intersect the center axis of the piston pin, the first lines being respectively defined at mutually diametrically opposite locations of the outer circumferential surface of the piston pin with respect to the piston axis;

wherein a pair of second lines are defined at the outer circumferential surface of the piston so as to be parallel to the piston axis and so as to be spaced 90° circumferentially from the first lines with respect to the piston axis, the second lines being respectively defined at mutually diametrically opposite locations of the outer circumferential surface of the piston with respect to the piston axis;

wherein the at least one under cut is formed in the outer circumferential surface of the

piston at at least one location of the outer circumferential surface spaced circumferentially away from each of the first lines and each of the second lines; and

wherein the at least one under cut is separated from the top surface of the piston and, at least when the piston is in a bottom dead center position, communicates with space inside the housing.

2. **(Currently amended)** The hermetic compressor according to claim 1, wherein an area of the at least one under cut occupies not less than one half of an area of the outer circumferential surface of the piston.

3. **(Currently amended)** The hermetic compressor according to claim 1, wherein an angle made by an edge of the at least one under cut and the outer circumferential surface of the piston is an acute angle.

4. **(Currently amended)** The hermetic compressor according to claim 1, wherein the at least one under cut is formed continuously to a skirt surface of the piston.

5. **(Previously presented)** The hermetic compressor according to claim 1, wherein the piston has a circumferentially formed land with a predetermined axial width extending axially from the top surface, and the circumferentially formed land is provided with an annular groove.

6. **(Previously presented)** The hermetic compressor according to claim 1, wherein the piston has a taper in at least one of a boundary between the top surface and the outer circumferential surface and a boundary between the outer circumferential surface and a skirt surface of the piston.

7. **(Previously presented)** The hermetic compressor according to claim 1, further comprising a motor element for rotating the crankshaft, the motor element being inverter-driven

at plural operation frequencies including an operation frequency that is at least a power supply frequency or less.

8. **(Original)** The hermetic compressor according to claim 1, wherein the refrigerant gas is R600a.

9. **(Currently amended)** A hermetic compressor comprising a housing which contains oil and houses a compression mechanism for compressing a refrigerant gas, the compression mechanism comprising:

a crankshaft disposed in a vertical direction and having a main shaft and an eccentric shaft;

a cylinder;

a cylindrical piston arranged to reciprocate in the cylinder in a direction of a cylinder axis; and

a connecting portion for connecting the piston to the eccentric shaft; and  
a piston pin mounted to the piston and connecting the piston to the connecting portion,  
the piston pin having a pin center axis;

the piston comprising:

a skirt surface at a side of the connecting portion side of the piston;

a top surface at a side of the cylinder side of the piston; and

an outer circumferential surface parallel to the cylinder;

wherein the outer circumferential surface includes a land that is on the same surface as the outer circumferential surface of the piston and an at least one under cut that is recessed with respect to the outer circumferential surface;

wherein a pair of first lines are defined at the outer circumferential surface of the piston so as to be parallel to the piston axis and so as to intersect the center axis of the piston pin, the first lines being respectively defined at mutually diametrically opposite locations of the outer circumferential surface of the piston pin with respect to the piston axis;

wherein a pair of second lines are defined at the outer circumferential surface of the piston so as to be parallel to the piston axis and so as to be spaced 90° circumferentially from the first lines with respect to the piston axis, the second lines being respectively defined at mutually diametrically opposite locations of the outer circumferential surface of the piston with respect to the piston axis;

wherein the land comprises

a circumferential land portion formed circumferentially about the piston and extending axially from the top surface of the piston for a predetermined distance,

a first pair of axial land portions formed respectively along the second lines continuously from the circumferential land portion to the skirt surface, and

a second pair of axial land portions formed respectively along the first lines from the circumferential land portion to the skirt surface, the second pair of axial land portions being continuous along the first lines, respectively, from the circumferential land portion to the skirt surface except where interrupted by a recess for accommodating the piston pin.

the land comprising:

a circumferentially formed land formed with a predetermined width extending from the top surface toward the skirt surface around the piston; and

an axially formed land formed in a predetermined circumferential width on the outer circumferential surface at circumferential locations at 0°, 90°, 180° and 270° with respect to the cylinder axis as a center, and continuously formed from the circumferentially formed land to the skirt surface.

#### Claims 10-13 (Cancelled)

14. (New) The hermetic compressor according to claim 9, wherein the at least one under cut is spaced axially below the top surface of the piston; and the piston and the at least one under cut are arranged so that the at least one under cut

communicates outwardly of the cylinder with a space inside the housing, at least when the piston is at the bottom dead center position.

15. **(New)** The hermetic compressor according to claim 9, wherein  
the at least one under cut comprises a plurality of under cuts, each formed in the outer circumferential surface of the piston at a location of the outer circumferential surface spaced circumferentially away from the first lines and the second lines; and  
each of the under cuts is spaced axially below the top surface of the piston.

16. **(New)** The hermetic compressor according to claim 15, wherein  
the under cuts are equally circumferentially spaced about the piston.

17. **(New)** The hermetic compressor according to claim 9, wherein  
the at least one under cut comprises four under cuts, each formed in the outer circumferential surface of the piston at a location of the outer circumferential surface spaced circumferentially away from the first lines and the second lines; and  
each of the under cuts is spaced axially below the top surface of the piston.

18. **(New)** The hermetic compressor according to claim 17, wherein  
the under cuts are equally circumferentially spaced about the piston.

19. **(New)** The hermetic compressor according to claim 1, wherein  
the at least one under cut comprises a plurality of under cuts, each formed in the outer circumferential surface of the piston at a location of the outer circumferential surface spaced circumferentially away from the first lines and the second lines; and  
each of the under cuts is spaced axially below the top surface of the piston.

20. **(New)** The hermetic compressor according to claim 19, wherein

the under cuts are equally circumferentially spaced about the piston.

21. **(New)** The hermetic compressor according to claim 1, wherein  
the at least one under cut comprises four under cuts, each formed in the outer  
circumferential surface of the piston at a location of the outer circumferential surface spaced  
circumferentially away from the first lines and the second lines; and  
each of the under cuts is spaced axially below the top surface of the piston.

22. **(New)** The hermetic compressor according to claim 21, wherein  
the under cuts are equally circumferentially spaced about the piston.